



The U.S. Geological Survey (USGS) is a natural science and information agency with programs in geology, hydrology, geography, biology, and geospatial information sciences. Geospatial information is ubiquitous in USGS as basic data, scientific interpretations, models, and databases that serve the scientific community, resource managers, and the public.

USGS geologic mapping provides information about geologic hazards, resources, coastal erosion, and the response of the coastal system to storms and sea-level rise. The agency maps coastal and marine habitats emphasizing wetlands, seagrass, coral reefs, and nursery and coastal foraging habitats of fish, birds, and mammals. Water resource information includes maps of estuaries and submerged aquatic vegetation, remotely sensed water quality, and real-time and retrospective coastal flooding data and flood hazard assessments. Products include:

- Base layer geographic information in the National Map ([www.nationalmap.gov/](http://www.nationalmap.gov/)), including surface elevation, bathymetry, hydrology, and land cover
- High-resolution coastal elevation data supplied by the National Elevation Dataset (<http://ned.usgs.gov/>)
- Seamless merged topographic and bathymetric elevation models available for several regions (<http://gisdata.usgs.net/website/topobathy/>)
- Coastal land cover information provided by the National Land Cover Database ([www.mrlc.gov/mrlc2k\\_nlcd.asp](http://www.mrlc.gov/mrlc2k_nlcd.asp))
- The Coastal and Marine Geology Internet Map Server (<http://coastalmap.marine.usgs.gov/regional/contusa/index.html>), which combines many basic data types and interpretative layers
- The National Assessment of Coastal Change Hazards (<http://coastal.er.usgs.gov/national-assessment/>), which addresses coastal erosion, sea-level rise, and coastal hazards through lidar and photographic mapping of land surfaces, numerical models of physical processes, and ecosystem modeling
- Coastal habitat mapping through airborne lidar (<http://coastal.er.usgs.gov/remote-sensing/index.html>)
- Benthic habitat classification using a combination of geophysical data, imagery, and geological samples ([http://walrus.wr.usgs.gov/research/projects/benthic\\_hab.html](http://walrus.wr.usgs.gov/research/projects/benthic_hab.html))
- Coastal watershed maps via the National Hydrography Dataset (<http://nhd.usgs.gov/>) and Elevation Derivatives for National Applications data set (<http://edna.usgs.gov/>)